Infant Mortality in Michigan

2011MDCH Summit

October 17,2011

Overview

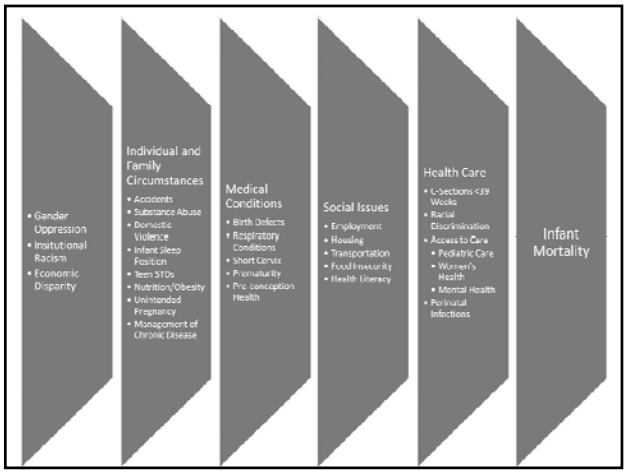
- Definition of the problem
- Institute of Medicine Quality Measures
- Diagnostic Toolkit
- Regional Perinatal Care as a model
- Health Equity Issues
- Health System Blindspots

The Problem

- Infant mortality rates vary by racial or ethnic groups
- Place can be a substitute for race in a segregated society
- The gap or disparity has not closed in decades even as overall infant mortality rates have improved.
- A comprehensive CQI process can help address disparities

Definitions

- Infant mortality- death of an infant within the first year of life.
- Disparities-"population specific differences in the presence of disease, health outcomes, or access to care."
- Race- a social construct that groups people based on the physical appearance or characteristics of a person by law , rule, or imposed practice. Privileges are assigned or denied base on such practice.



IOM Quality Measures 1

✓Safe –Avoiding injuries to patients from the care that is intended to help them

✓ Effective –providing service based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse , respectively)

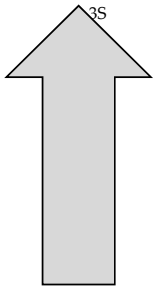
IOM Quality Measures 2

- ✓Patient – centered –Providing care that is respectful of and responsive to the individual patient preferences , needs , and values and ensuring that patient values guide all clinical decisions
- ✓ Timely –Reducing waits and sometimes harmful delays for both those who receive and those who give care

IOM Quality Measures 3

- ✓Efficient –Avoiding waste , including waste of equipment , supplies , **ideas , and energy**.
- ✓ Equitable- **Providing care that does not vary in quality because of personal chacteristics** such as gender,ethnicity , geographic location , and socio-economic status.

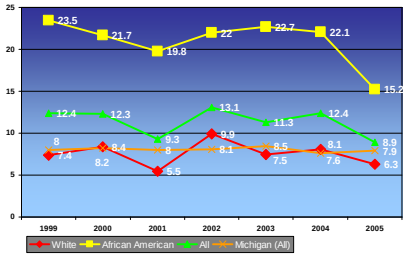
Infant Mortality in Michigan



- For every 1,000 live births, eight infants die before their first birthday.
- Rate has remained higher than the U.S. rate for more than a decade.
- African American rate (15.5 in 2009) averages about 3 times higher than the white rate and 1.5 times higher than the rate for other races

Trudy Esch, MS, RN
Perinatal Nurse Consultant
Michigan Department of Community Health

Genesee County – Disparities in Infant Health



Problem Solving Tools

- Fishbone
- Life Course Model
- Periods of Perinatal Risk

Life Course Model
Rethinking Maternal Child Health

- … that while obtaining high quality healthcare is very important…achieving optimal health for **all** goes **beyond medical /clinical care and beyond current public health practice .**
- US DHHS, HRSA,MCHB Concept Paper November 2010 , Version 1.1

Life Course Concept # 1 **TIMELINE**

- Today's experiences and exposures influence tomorrow's health .

Life Course Model Concept #2
Timing

Health trajectories are particularly affected during critical or sensitive periods.

Life Course Concept #3
Environment

The **broader community environment** –biologic, physical , and social- strongly affects the capacity to be healthy.

Life Course Concept #4 **Equity**

While genetic make-up offers both protective and risk factors for disease conditions, **inequality affects personal choice.**

U.S. Department of Health & Human Services

NATIONAL PARTNERSHIP FOR ACTION to End Health Disparities

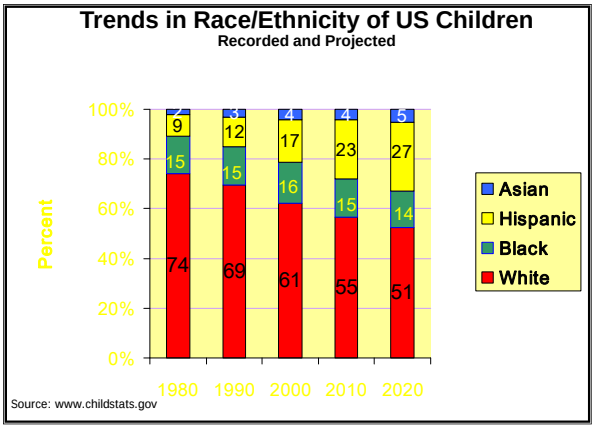
Health equity is attainment of the highest level of health for all people.
Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, **and the elimination of health and healthcare disparities.**

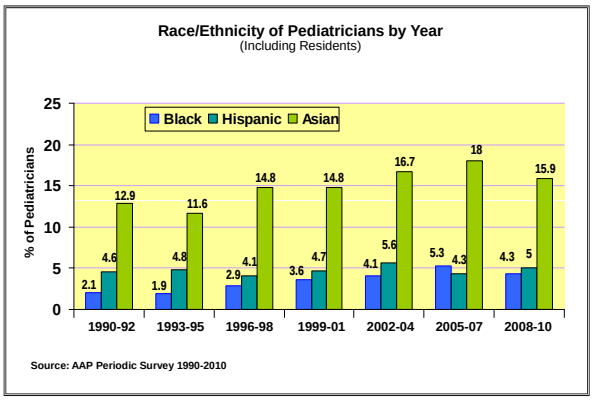
Infant Mortality as Health Equity Indicator

Premature <37 wks	10.2%	12.7%	15.2%	
LBW ,<5.5 lb	8.5%	10.4%	13.6%	
Medicaid paid	42.8%		74.9%	
Total births	121,237	5,712	2,305	1341 58.2%
Teen births	10.1%	13.4% (n767)	20.5%	
Repeat teen births	18.4%	21.9% (164)	25%	25%
Births to unwed mothers	40.5%	53%	77.5%	
Births ,moms no GED/Diploma	16.2%	18.2%	29.9%	
Births , smoking moms	19.3	23%	26.9%	26.1-28.3%
Infant deaths	7.5 n-881	9.4 n-51	12.9 n-28	18 (2006)

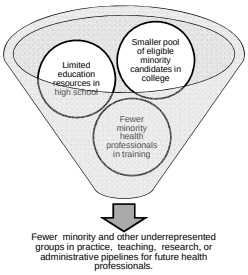
" Race " does matter !

"Place " does matter !





Persistent lack of equity in the health professions



PERINATAL PERIODS OF RISK - CityMatch

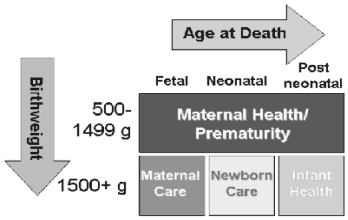
*No simple, standardized, widely accepted approach for communities to examine infant mortality.

*Current approaches don't readily identify potential gaps in the community for further reductions.

*Current approaches don't directly lead to action to targeted studies, investigations or prevention activities.

*Current approaches are not simply and easily communicated to community partners, which can inhibit mobilization.

citymatch The National Organization of Urban MCH Leaders



The approach divides fetal-infant mortality into **four strategic prevention areas:**
maternal health/prematurity,
maternal care,
newborn care,
and infant health. PPOR mapping of fetal-infant mortality enables communities to identify and further investigate areas in which there are the greatest opportunities for local impact. Follow-up investigations provide in-depth information and strategic direction for targeted prevention of fetal and infant mortality.

Ten IOM Rules for Transforming Care

- •Care based on continuous healing relationships
- • Customization based on patient needs and values
- • Shared knowledge and free flow of information
- • Patient as the source of control
- • Evidence – based decision making
- • Safety as a system property
- • The need for transparency
- • Anticipation of needs
- • Continuous decrease in waste.The health system should not waste resources or patient time
- • Cooperation among clinicians

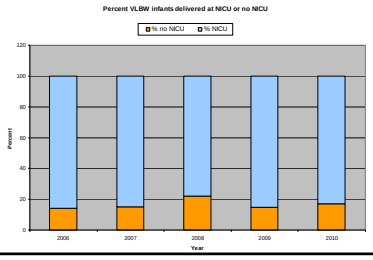
Perinatal Regionalization Esch

H I S T O R Y

- Development of effective newborn intensive care in the late 1960s and 1970s
- 1970: March of Dimes Birth Defects Foundation assembled a multidisciplinary group of professionals representing all aspects of perinatal care: National Committee on Perinatal Health (NCPH)
- 1976: NCPH recommended a regionalized system for perinatal care (*"Toward improving the Outcomes of Pregnancy"):* focused to inpatient care
- Implemented further by most state health departments

Michigan's Perinatal System Esch et al MDCH

- The demise of a regional perinatal system in Michigan in the 1990's.
- The number of high-risk pregnancies delivered at hospitals without neonatal intensive care units has increased.



2009 Appropriations Bill

Right Patient

Right Place

Right Time

- The Michigan Legislature asked the Department of Community Health:
- "Convene appropriate stakeholders to determine the efficacy and impact of restoring a statewide coordinated regional perinatal system in Michigan."

Guidelines Esch

- The Michigan Perinatal Level of Care Guidelines are based on AAP/ACOG Level of Care Guidelines modified to reflect Michigan's standards.
- The Guidelines provide a framework to define and evaluate the level of perinatal care delivered by hospitals.

Guidelines Esch

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Advantages of Guidelines

- Standard definitions and names (nomenclature)
  * For comparison of outcomes, resource utilization and cost.
  * Informative for public, patients and payors.
- Uniformity in definitions of levels of care
  * Minimize need for business to develop own standards.
  * Consistent standards of service provided for each level of care.

Recommendations

- Designate a core set of hospitals as perinatal centers to serve as regional training and consultation sites.
- Establish a statewide mechanism to oversee and assure adherence to the MI Level of Care guidelines.
- Advise that all Level III NICUs should have a NICU Follow-up clinic.
- Esch

Perinatal Regionalization

Key –Hospitals by CON
OB (Birthing) Hospital
OB (Birthing)/NICU Hospital

Number of NICU Facilities per Region
Region 1 - one
Region 2S - multiple
Region 2N - multiple
Region 3 - two
Region 5 - one
Region 6 - two
Region 7 - one
Region 8 - one

Prepared by: Esch, T.
Revised March 2011

Recommendations Cont.

- Develop:
  - Standards for NICU Follow-up clinics and a mechanism for authoritative recognition
  - System for following up on NICU graduates including use of current technology
- Review Michigan's Guidelines on a regular basis to assure that they represent current, evidence-based approach for perinatal care.

Recommendations Cont.

- Recommended that the **Vermont Oxford Network** model is used for a statewide quality improvement process.
  - **17 of the 20 NICUs** in the state, including all of the large units are participating in VON
  - **A Michigan VON Quality Collaborative was created in 2008**
- **Hold an annual conference** to review and provide education regarding the guidelines.

Health System Blindspots

Since 1997 ,Genesee County's initiative-**P**rograms to **R**educe **I**nfant **D**eaths **E**ffectively ,has drawn attention to the challenge of racial privilege and it's impact on community health outcomes and the health system .Over 1400 participants have attend the UNDOING RACISM WORKSHOP.

UNDOING RACISM

The People's Institute For Survival and Beyond

- **Undoing Internalized Racial Oppression**
  Internalized Racial Oppression manifests itself in two forms:
  Internalized Racial Inferiority
  The acceptance of and acting out of an inferior definition of self, given by the oppressor, is rooted in the historical designation of one's race. Over many generations, this process of disempowerment and disenfranchisement expresses itself in self-defeating behaviors.
  Internalized Racial Superiority
  The acceptance of and acting out of a superior definition is rooted in the historical designation of one's race. Over many generations, this process of empowerment and access expresses itself as unearned privileges, access to institutional power and invisible advantages based upon race.

UNDOING RACISM

The People's Institute For Survival and Beyond

» **Gatekeeping**
Persons who work in institutions often function as gatekeepers to ensure that the institution perpetuates itself. By operating with anti-racist values and networking with those who share those values and maintaining accountability in the community, the gatekeeper becomes an agent of institutional transformation.

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Healthy Start

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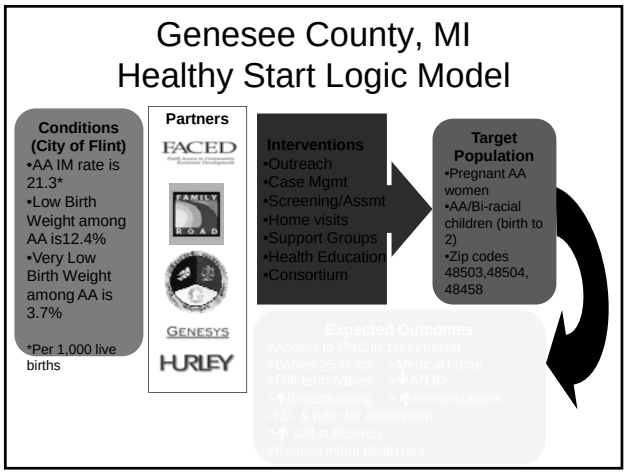
Care Team

Community Advocate **Registered Nurse** **Social Worker** **Registered Dietician**

Program Coordinator


Genesee County, MI
Healthy Start Logic Model
Conditions (City of Flint)
•AA IM rate is 21.3*
•Low Birth Weight among AA is12.4%
•Very Low Birth Weight among AA is 3.7%
*Per 1,000 live births
Partners
FACED
FAMILY ROAD
GENESYS
HURLEY
Interventions
•Outreach
•Case Mgmt
•Screening/Assmt
•Home visits
•Support Groups
•Health Education
•Consortium
Target Population
•Pregnant AA women
•AA/Bi-racial children (birth to 2)
•Zip codes 48503,48504, 48458
Expected Outcomes
>Access to PNC in 1st trimester
>Babies ≥5 ½ lbs
>Medical home
>Full-term babies
>↓ATOD
>↑Breastfeeding
>↑Immunizations
>I.D. & refer for depression
>↑ self sufficiency
>Reduce infant death rate